

Figure 1  
Prior Art

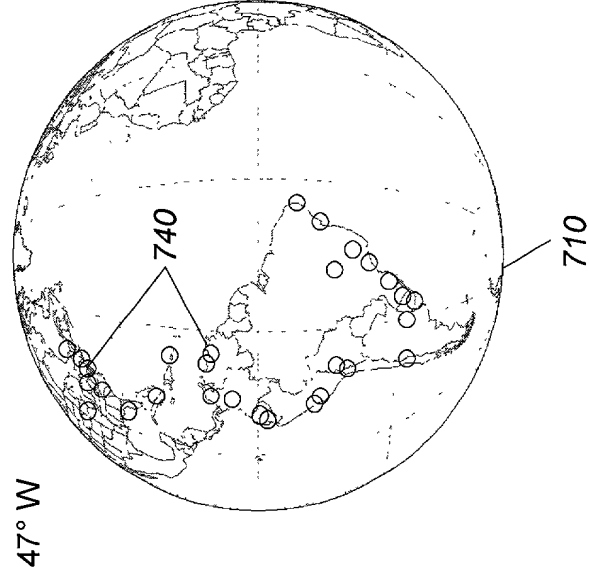


Figure 2  
Prior Art

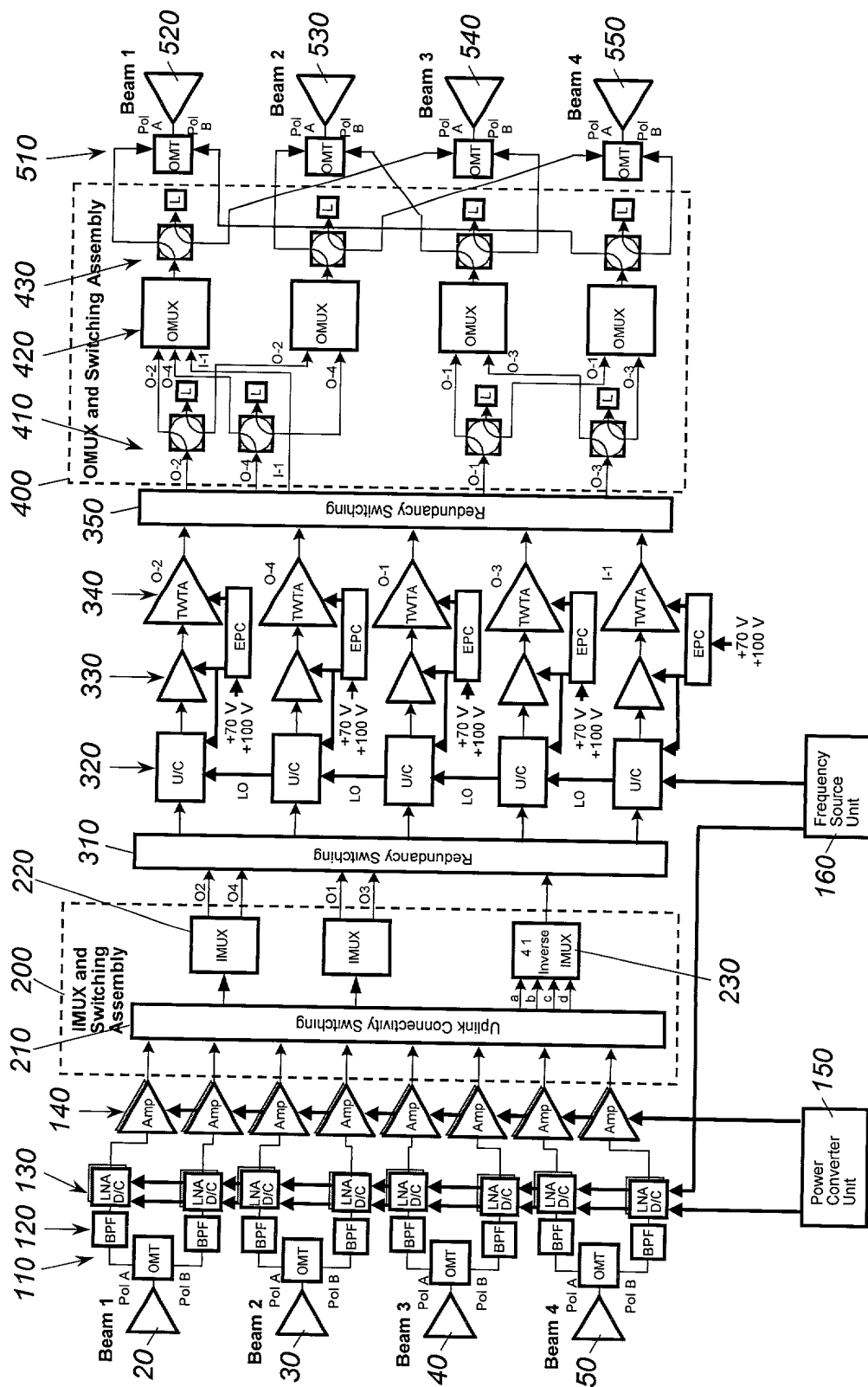
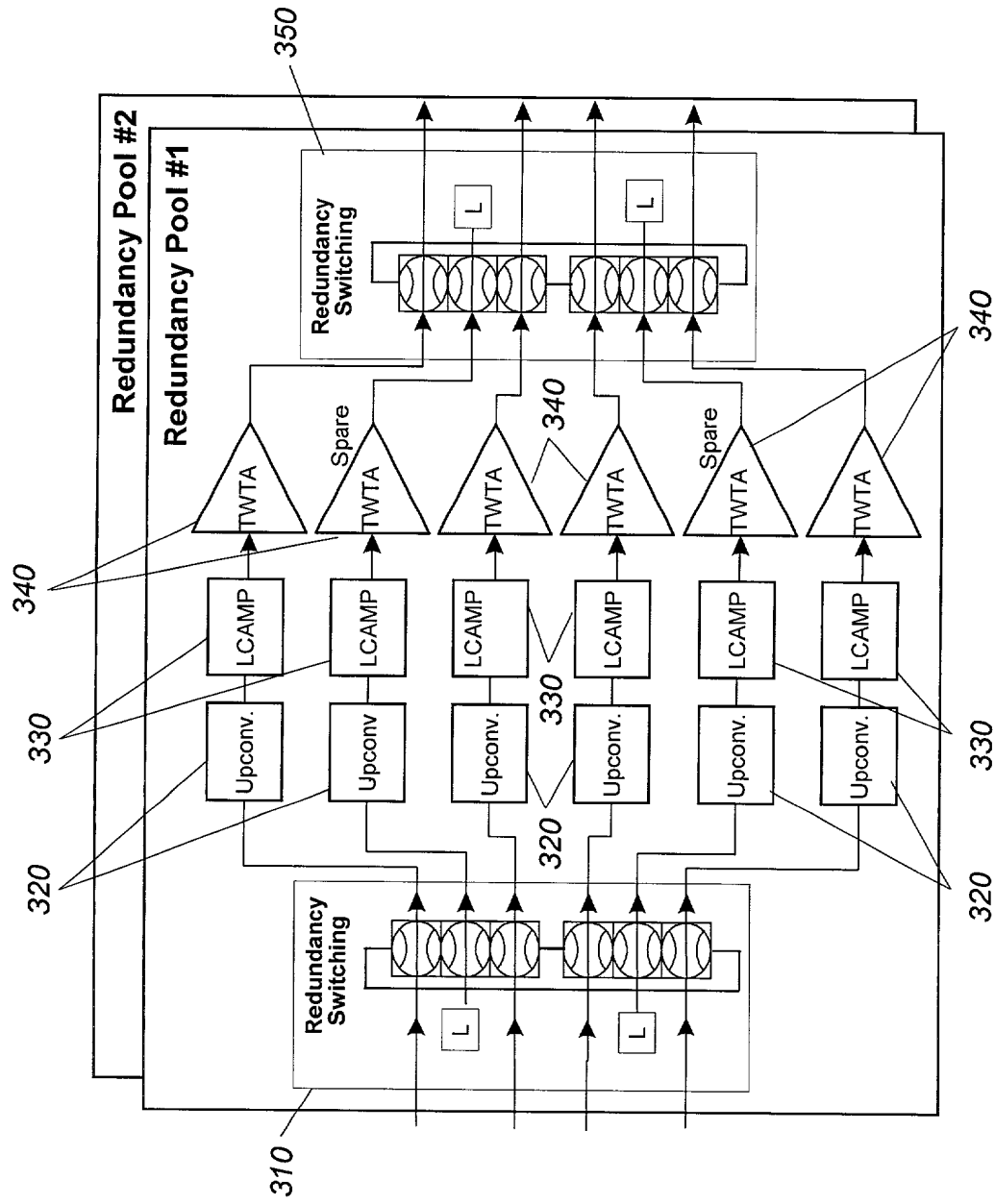


Figure 3



**Figure 4**

FIG. 5 is a schematic diagram of a four-channel optical communication system. The system includes four input multiplexers (412, 414, 416, 418), four output multiplexers (422, 424, 426, 428), four beam splitters (432, 434, 436, 438), four optical modulators (OMT) (512, 514, 516, 518), and four beam detectors (Beam 1, Beam 2, Beam 3, Beam 4). The system is configured to receive four input signals (A, B, C, D) and output four signals (AB, A, B, 0). The input signals are combined at the input multiplexers and then split into four channels. Each channel is processed by an OMT and a beam detector. The output signals are then combined at the output multiplexers. The system is designed to handle four different input signals (A, B, C, D) and output four signals (AB, A, B, 0).

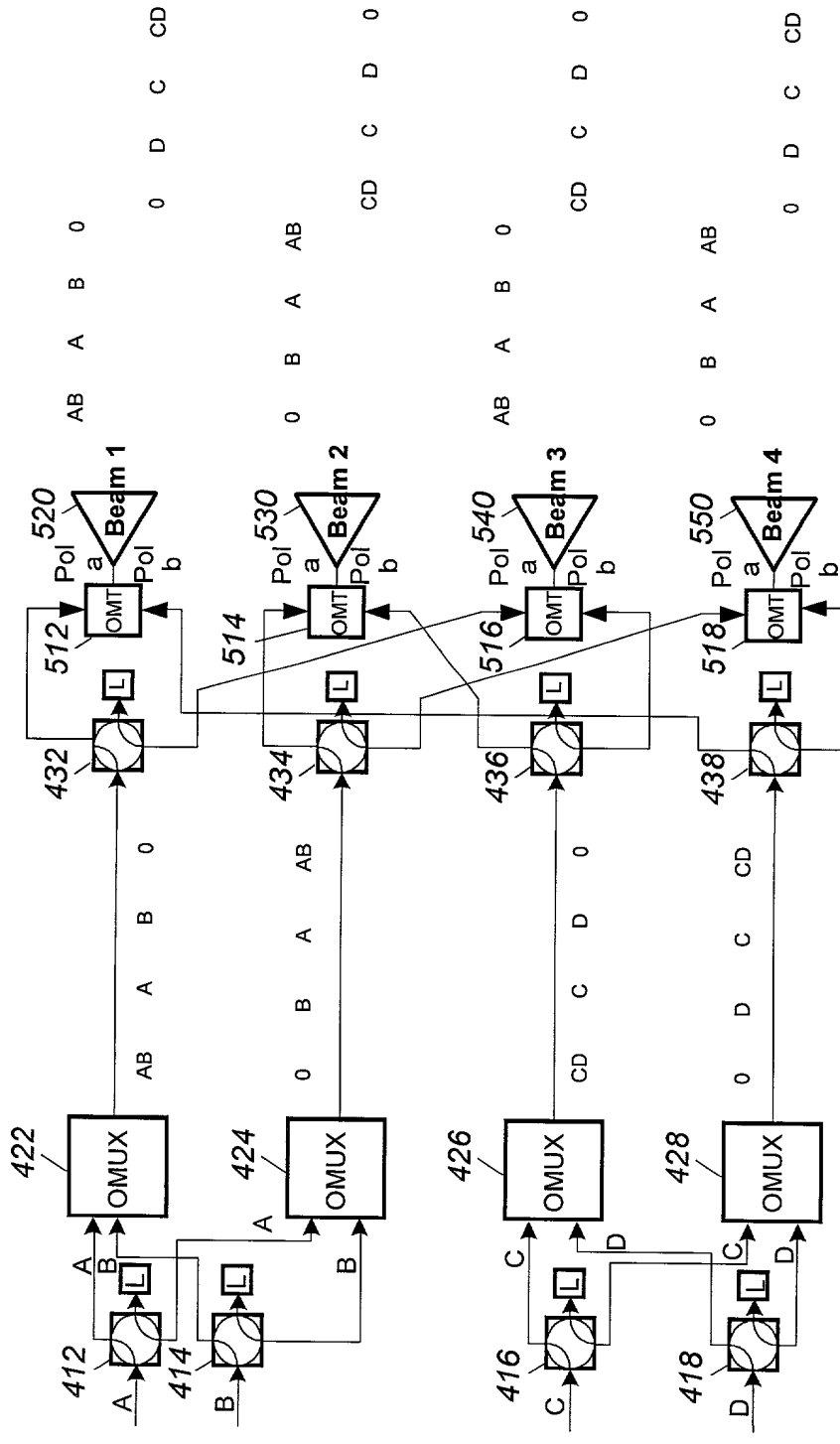


Figure 5

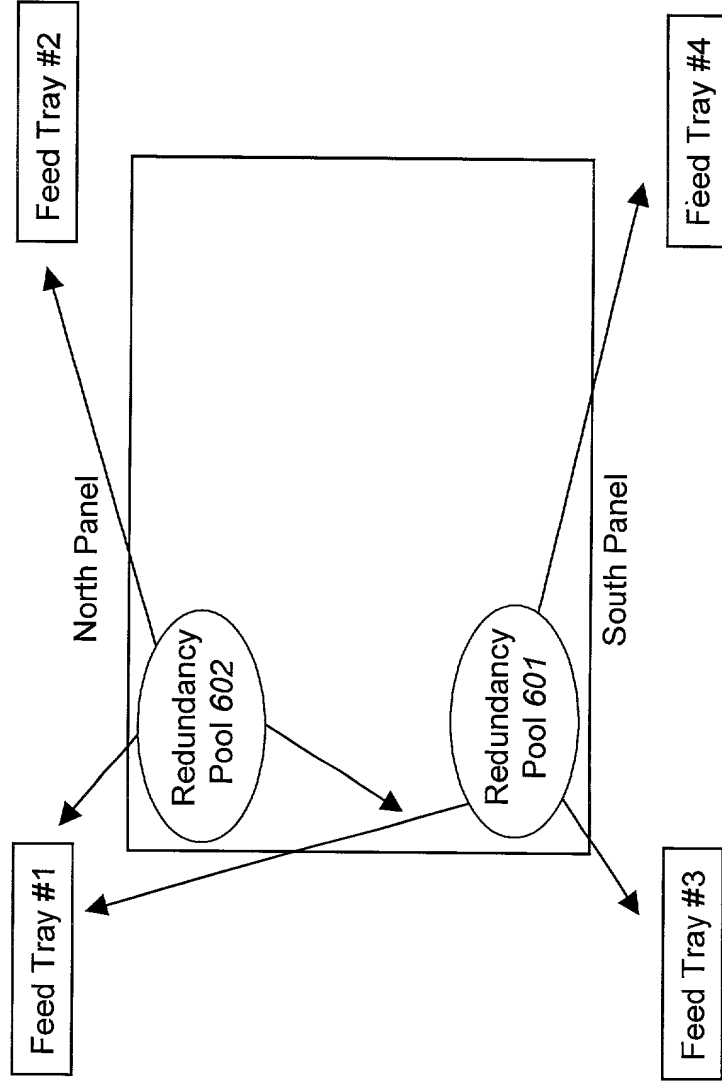


Figure 6